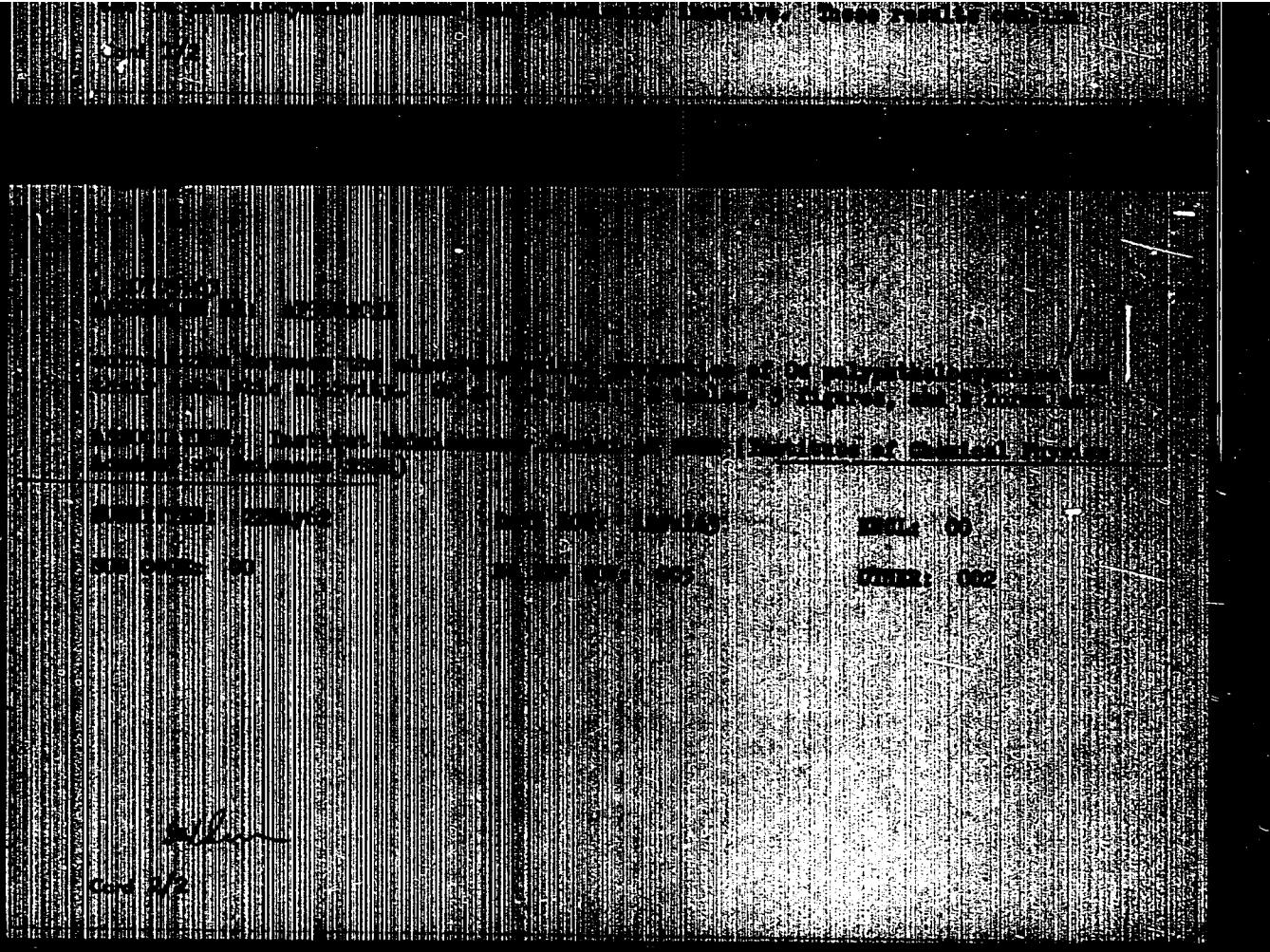


"APPROVED FOR RELEASE: 09/24/2001

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CIA-RDP86-00513R000515820008-2"

106211-67 ENT(m)/EMP(j) IIP(c) IN/RM  
ACC NR AP6030703 (Av) SOURCE CODE: UR/0195/66/007/004/0660/0665

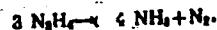
AUTHOR: Dokukina, Ye. S.; Golovina, O. A.; Sakharov, M. M.; Aseyeva, R. M.

ORG: Institute of Chemical Physics, AN SSSR (Institut khimicheskoy fiziki AN SSSR)

TITLE: Investigation of the catalytic properties of organic semiconductors prepared by the thermal dehydrochlorination of poly(vinyl chloride)

SOURCE: Kinetika i kataliz, v. 7, no. 4, 1966, 660-665

TOPIC TAGS: hydrazine, decomposition, catalysis, organic semiconductor, catalytic property, chemical reaction kinetics  
ABSTRACT: A study has been made of the catalytic activity of polyenes prepared by the dehydrochlorination of chlorinated poly(vinyl chloride) 400, 500, and 700C on the example of the decomposition of hydrazine, and hydrogen peroxide (as well as acetic acid). Study of the decomposition of hydrazine vapors in the presence of the polymers was carried out under static conditions in a vacuum chamber at 80—180C and pressures below 1 mm Hg. Reaction kinetics were studied from changes in the pressure of gaseous reaction products. The experimental data are given in graphic and tabular form. It was found that overall the polyenes, the decomposition proceeded with a degree of conversion of 80—90% according to the reaction,



Card 1/2

UDC: 621.315.592—44

L 06211-67  
ACC NR: AP6030703

Up to degrees of conversion of 50—80%, the decomposition was a first-order reaction. The greatest catalytic activity was displayed by the polyene, prepared at 700C. However, no accurate correlation could be established between the catalytic activity, electrical conductivity and unpaired spin concentration for the polyenes. In the case of hydrogen peroxide decomposition, the catalytic activity of the polyenes proved to be very low. Orig. art. has: 2 tables. [W.A. 68] [SM]

SUB CODE: 07, 29Y SUBM DATE: 22Feb65/ ORIG REF: 013/ OTH REF: 003

Card 2/2 LC

KONOV, V., inzh.; SHANHAROV, S., inzh.; SUBBOTIN, I., inzh.; CHEPPANOV, Y., inzh.; KARKANO, B., inzh.; RASSNICHAPKIN, V., inzh.; BORISOVA, T., inzh.; PELEPELKITSYN, N., inzh.; GARMASH, V., inzh.; GOLOVINA, V., inzh.

New developments in building practice. Na stroi. Ros. 4 no.1:7,11,14,18,  
26,30 Ja '63. (MIRA 16:3)  
(Building—Technological innovations)

Golovina, V. A.

AUTHORS: Kreymer, S. Ya., Tushilina, N. V., Golovina, V. A., 32-3-2/52  
Tymbina, N. A.

TITLE: The Determination of Cobalt and Cadmium in Nickel of High Purity  
(Opravleniya kobal'ta i kadmiya nikele vysokoy chistoty)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 3, pp. 262-264 (USSR)

ABSTRACT: This method of determining cobalt is based upon a suggestion made by V.P. Zhivopistsev [Ref. 1, 2], according to which cobalt together with diantripyril-methane and ammonium thiocyanate gives a light blue precipitation which is soluble in concentrated ammonia. From the precipitation the cobalt is colorimetrized with nitroso-R-salt. Precipitation is carried out in the medium of sulfuric acid, the deposit is distinctly soluble in hot water, and must be washed with 1% ammonium thiocyanate solution. The process of analysis and the results obtained when determining cobalt (0.0002% Cr) are given. Determination of cadmium is carried out by a modified method, also developed by Zhivopistsev [Ref. 2], by precipitation with diantripyril-methane in the presence of bromide- or iodide ions. In this way it is possible to determine up to

Card 1/2

The Determination of Cobalt and Cadmium in Nickel of High Purity 30-3-2/52

0.0001 - 0.01% cadmium in nickel, potassium iodide being used in the case of low percentages, because it forms complexes which are not so easily soluble. If copper is present, it must be removed by precipitation with thiosulfate; after combustion of organic substances cadmium is determined polarographically. An exact process of analysis as well as a table of results obtained by the suggested and by two other methods is given. There are 2 tables, and 5 references, 4 of which are Slavic.

ASSOCIATION: "Severonikel'" Combine (Kombinat "Severonikel'")

AVAILABLE: Library of Congress

1. Nickel-Cobalt-Determination    2. Nickel-Cadmium-Determination

Card 2/2

AFANAS'YEV, V.P.; GOLOVINA, V.A.; KOMOCHKOV, M.M.; MEKHEDOV, V.N.;  
OGANESYAN, K.O.; ROZIKOV, V.Ye. [deceased]; ROZANOVA, A.M.

Dosimetric check. Med. rad. 5 no.1:6-12 Ja '60. (MIRA 15:3)  
(RADIATION—DOSAGE)

GOLOVINA, V.A. (Kemerovo)

Use of a television lense as a device for increasing the visibility  
of demonstrations. Khim. v shkole 16 no.2;86 Mr-Ap '61.

(MIRA 14:6)

(Chemical laboratories--Equipment and supplies)

GOLOVIN, V. Y.

GOLOGINIA, M. J., ZALUBOVSKY, I. J., and CHILJEV, B. A.

"Sensitive Current Integrator"

report submitted for the IAEA conf. on Nuclear Electronics, Belgrade, Yugoslavia  
15-20 May 1961

GOLOVINA, V. M.

"On the Movement of a Preheated viscous Liquid in a Round Cylindrical Pipe."

report presented at the 13th Scientific Technical Conference of the Kuybyshev Aviation Institute, March 1959.

NOGAILER, R.M., prof. (Astrakhan'); VARIK, I.Ye. [deceased]; GOLOVINA, V.T.

Reviews and bibliography. Vop. kur., fizioter. i lech. fiz.  
kul't. 30 no.1:87-89 Ja-F '65 (MIRA 18:8)

GOL'DFAYL', L.G.; VARIN, I.Ye. [deceased]; GOLOVINA, V.T.

Reviews and bibliography. Vop. kur., fizioter. i lech. fiz.  
kult'. 30 no.3:274-276 My-Je '65. (MIRA 18:12)

38215. GOLOVINA, V. YA.

Povysheniye molechnoy produktivnosti romanovskikh ovets.  
(Stat'i 1 i 2). Trudy Vsesoyuz. opyt. stantsii zhivotnovodstva,  
vyp. 1, 1949, s. 48-79

GOLOVINA, Ye. N.; KITSIS, G.N.

Methodological center at a district hospital. Zdravookhraneniye  
6 no. 58-9 S-0163 (MIRA 16:12)

1. Iz orgeyevskoy rayonnoy bol'nitsy (glavnnyy vrach Ye.M. Golovina).

USOL'TSEVA, Ia.V.; GOLOVINA, Ye.N.

Dermovascular reactions following the local action of heat and cold on intact and bruised tissues; experimental observations.  
Vop. kur., fizioter. i lech. fiz. knil't. 24 no. 4:342-346  
(MIRA 13:8)  
Jl-Ag '59.

1. Is Leningradskogo instituta fizioterapii i kurortologii  
(dir. - kand. meditsinskikh nauk G.S. Antonov).  
(HEAT--PHYSIOLOGICAL EFFECT) (COLD--PHYSIOLOGICAL EFFECT)  
(SKIN)

GOLOVINA, Ye.S.; KHAUSTOVICH, G.P.

Interaction between carbon and carbondioxide at high temperatures.  
Teplofiz. vys. temp. 2 no.2:267-273 Mr-Ap '64. (MIRA 17:6)

1. Energeticheskiy institut imeni G.M. Krzhizhanovskogo AN SSSR.

Golovina, Ye. P.  
USOL'TSMVA, Ye. V.; GOLOVINA, Ye. P.; SHTOLOTSER, V.R.

Effect of heat and cold in the treatment of bruises and strain of  
the soft tissues. Sov.med. 21 Supplement:6 '57. (MIRA 11:2)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta  
fizioterapii i kurortologii.  
(HEAT--PHYSIOLOGICAL EFFECT)  
(COLD--THERAPEUTIC USE)  
(MUSCLES--WOUNDS AND INJURIES)

Golovina, Ye. P.

GOLOVINA, Ye. P.

Treatment of appendicular infiltrates with local hypothermia. Sov.  
med. 21 no.9:83-87 8 '57. (MIRA 11:1)

1. In III khirurgicheskoy kliniki (sav. - prof. N.I.Blinov)  
Instituta umovershenstvovaniya vrachey imeni S.M.Kirova, Leningrad.  
(APPENDICITIS, ther.  
ice bats, local application)

GOLOVINA, Ye.P., Cand Med Sci—(diss) "Therapeutic significance of local cooling in soft tissue inflammation." Len, 1958. 20 pp (Len State Order of Lenin Inst for the Advanced Training of Physicians in S.M.Kirov), 200 copies (IL, 47-53, 135)

-68-

GOLOVINA, Ye. P. (Leningrad, Chkalovskiy pr., d.38, kv.46)

Result of treatment by local cooling in closed soft tissue injury.  
[with summary in English]. Vest.khir. 80 no.6:78-85 Je '58 (MIRA 11:?)

1. Is 3-y khirurgicheskoy kliniki (zav. - prof. N.I. Blinov) Leningrad  
skogo instituta usovershenstvovaniya vrachey im. S.M. Kirova.  
(CONTUSIONS, THUR.,  
local colling, exper. & clin. evaluation (Eng))

L A G e L o v i n g V E S

21

Combustion of coal. J. S. Golubina, G. M. Krishnaswamy, Rangaswamy Inst., Member, Inst. Acad. Nauk S.S.R., Odissi, USSR, Noch 1969, 1263-81.—Spherical samples of about 1.0 cm. diam. were prep. by compression and cold-rolling of finely powdered material (about 60  $\mu$  grain size) (or by tumbling in the case of IV) from electrode C (I), anorthosite dust (II), Monazite-gneiss (III), massive natural anorthosite (IV). The diam. of the samples varied somewhat, from 1.40 to 1.57 cm., the d. varied in the very narrow limits 1.16-1.17 g./cm.<sup>3</sup>; consequently, differences of porosity were very small. Plotting of I required addition of 20% magnet, as a result of which the samples, after 8 hrs. heating at 1000°, contained 3% of magnet roke; II required 12% magnet and crystallized, after cooling, about 9% magnet. III could be pelleted without magnet. Rates of combustion in a stream of air (3-6) cm./sec.), detd. by the loss of wt., are expressed in  $\delta = \text{g./sq. cm. hr.}$  With I, oxidation becomes noticeable at 410°; above 520°, the temp. rises spontaneously very rapidly, ending in ignition. For II, the range of measurements was 340-610°; for III 307-460°.

for IV 303-619°. Twelve-fold variation of the velocity of the air stream in the case of I (3-6) cm./sec.), and its 20-fold variation in the case of II and III (3-6) cm./sec.), had no effect on the rates of oxidation. The apparent activation energy  $E$ , from plots of  $\log \delta$  as a function of  $1/T$ , was const. (35.5 kcal./mole) for I up to about 460°, but showed a break above that temp., indicating a slowing-down of the process. The same effect was found with II and, particularly, with IV, but could not be observed with III owing to early spontaneous temp. rise and ignition. For II,  $E = 36.0$ , and for III, 29.0. For IV, in the lower-temp. range,  $E = 31.5$ , and in the higher-temp. range,  $E = 16.0$ , i.e. roughly half the low-temp. activation energy. At the same temps.,  $\delta$  for III is about 8-10 times as high as for I, and about 1.5-2 times as high as for II; consequently, among the compressed samples, III is the most active, and I the least active. The oxidizability of IV is low, and close to that of I. The preponderant role of phys. structure appears from a comparison of II and IV, both chemically identical (anorthosite); whereas IV reacted without spontaneous temp. rise up to 610°, the limit for II was ~500°. The slowing-down of the reaction above 500° is ascribed to changing penetration of O<sub>2</sub> into the interior of the sample; in the higher-temp. range, the reaction takes place mainly in a spherical layer following the surface of the sample. N. Thus

GOLOVINA, Ye. S

"Volumetric Burning of Carbon." Thesis for degree of Cand. Technical Sci. Sub 8  
Jun 50 Power Engineering Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR

[redacted] Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering  
in Moscow in 1950. From Vechernyaya Moskva. Jan-Dec 1950.

GOLOVINA, YE. S.

USSR/Engineering - Combustion, Coal

Jul 52

"Effusion Combustion of Carbon," Ye. S. Golovina

"Iz Ak Nauk, Otdel Tekhn Nauk" No 7, pp 1011-1025

PL 220783  
Presents exptl data on effusion combustion of carbon plates in temp range of 300-7000 C at rates of effusion 0.12-1.5 cm/sec. Analyzes process of effusion combustion, obtaining formulas for calcg distribution of O and CO along thickness of plate. Establishes sharp decrease in O zone with increase of temp under condition of effusion flow through very dense porous C plate. Establishes considerable effect of effusion rate on the length of O zone and develops eq for calcn of this length. Submited by Acad G. M. Krzhizhanovskiy 19 Oct 51.

GOLOVINA, YE. S.

SSSR/Chemistry - Diffusion of Gases

1 Jul 52

"The Diffusion of Gas in Carbon," Ye. S. Golovina,  
Power Eng Inst imeni G. M. Krzhizhanovskiy, Acad Sci  
SSSR

"Dok Ak Nauk SSSR" Vol LXXXV, No 1, pp 141-144

The relation between temp and diffusion coeff for CO<sub>2</sub>  
through a carbon disk was measured in a specially  
made app. The carbon disks, 1.5 mm thick, of the  
telephone diaphragm type, were made at the Kudinovskiy  
Plant. The diffusion coeff was measured for the temp  
range of 20-600°. When plotted logarithmically,  
there is a linear relationship between the temp and  
10<sup>3</sup>. diffusion coeff. Presented by Acad G. M. Krzhiz.  
July 1, 1952.

224T20

Fuel Abstracts  
June 1954  
Industrial Furnaces, Kilns,  
Sts., Combustion

1459 THE PROPAGATION DURING COMBUSTION OF BED OF PULVERIZED CARBON.  
Apparatus used was that of I.I.T. Acad. Inst. USSR, Ordos. Tokhi. Komit (Bull. Acad. Sci. U.S.S.R., No. 10, 1953, p. 11). A fixed bed of 0.000, 0.001, 0.002 and 0.003 mm carbon particles, 27 mm in diameter and weight 1.0 g/cm<sup>3</sup>, was heated by 947 to 700°C, with air entering at 0.5 cm/sec. The combustion process was similar to that in effusion combustion of a solid layer, and in percolating combustion of large fractions. Equations were derived.

10/11/54 LM  
SP

GOLOVINA, Ye. S.

"Author Reference of Dissertations on the Subject 'Investigation of the Cathode Process in the Electrolytic Deposition of Tin-Zinc Alloys,' Submitted in Fulfillment of the Degree of Candidate of Technical Sciences." Cand Tech Sci, Moscow Inst of Nonferrous Metals and Gold imeni M. I. Kalinin, Min Higher Education USSR, Moscow, 1955. (KL, № 17, Apr 55)

SO: Sum. №. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations  
Defended at USSR Higher Educational Institutions (16).

GOLOVINA, E. S. and FIODOROV, G. G.

"Influence of Physical and Chemical Factors on Burning Velocity" a  
paper submitted at the Sixth International Symposium on Combustion, New Haven,  
Conn., 19-24 Aug 56.

Golovina and Fyodorov- Institute of Energetics AS USSR, Moscow, USSR.

GDOLOVINA, Ye. S. and KHITRIN, L. N.

Institut d'Energetique de l'Academie des Sciences de l'URSS  
Moscow, "Influence de l'Echauffement des melanges benzine-air sur la vitesse  
de propagation de la flame."

Above is an amendment to the list of Soviet Bloc countries participating in the 16th International Congress of Pure and Applied Chemistry to be held in Paris 18-24 July 1957. The original list was forwarded by IR-713-57. For each country there are shown the titles of the papers to be presented (quoted exactly in English, French as indicated on each paper), author, and author's organization.

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000515820008-2

GOLOVINA, N. S. and KHOTIMIN, L. N., AS USSR, Moscow

"Influence of the Heating on a Benzene Air Mixture on the Velocity  
of the Propagation of the Flame," a paper submitted at the 16th Inter-  
national Congress of Pure and Applied Chemistry, Paris, 18-24 July 1957.

APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000515820008-2"

SOV/137-59-2 2243

Translation from: Referativnyy zhurnal. Metallurgiya. 1959 Nr 2. p 3 (USSR)

AUTHORS: Golovina, Ye. S., Fedorov, G. G.

TITLE: Effect of Physicochemical Factors on the Flame Velocity (Vliyanie fiziko-khimicheskikh faktorov na skorost' rasprostraneniya plameni)

PERIODICAL: V sb.: Issled. protsessov gorenija. Moscow. AN SSSR. 1958 pp 44-56

ABSTRACT: Results are adduced of an investigation of combustion velocity by using Bunsen burners at different concentrations of O<sub>2</sub> and of the following fuels: Benzol, hexane, and hexene-hexane fraction. The combustion velocity was determined by measuring the angle at the tip on the photograph of the flame cone and by calculating the flow velocity at the burner outlet. A theoretical analysis of the data obtained was carried out.

G. G.

Card 1/1

GOLOVINA, Ye. S. and FEDOROV, G. G.

"Effect of Physicochemical Factors on the Velocity of Flame Propagation." (Study of Combustion Processes; Collection of Articles on Work Done by the Power Institute imeni G. M. Krzhizhanovskogo AS SSSR) Moscow Izd-vo An SSSR, 1958. 123 p.

(Laboratory of Combustion Physics)

For abstract see Khitrov, L. N.

GOLOVINA, Ye. S., SOROKINA, A. V., and KHITRIN, L. N.

"Effect of Preheating the Gasoline-Air Mixture on the Flame Propagation Velocity."  
· (Study of Combustion Processes; Collection of Articles on Work Done by the Power  
Institute imeni G. M. Kryzhanovskogo AS USSR) Moscow Izd-vo AN SSSR, 1958. 123 p.  
(Laboratory of Combustion Physics).

BLOKH, Semenil Yakovlevich; DANILEVICH, Ye.P.; GOLOVNINA, Ye., red.;  
LIMBUKDEV, A., tekhn.red.

[Price manual for materials and equipment approved for the  
period January 1, 1958 to January 1, 1959] Spravochnik tsen  
na materialy i oborudovaniye, utverzhdennykh v period s 1 ian-  
varia 1958 g. po 1 ianvaria 1959 g. Moskva, Gosfinizdat.  
Pt. 5. 1959. 672 p. (MIRA 12:9)  
(Industrial equipment--Prices)

GOLOVINA, S. S.

THE INFLUENCE OF THE ENVIRONMENT ON PUPILS' LEARNING

AUGUSTUS, V. P.

APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000515820008-2"

GOLOVINA, Ye. S.; KHAUSTOVICH, G.P.

High temperature reduction of carbon dioxide by coal. Inzh.-fiz.  
shur. no. 3:13-20 № 160,  
(MIRA 13:10)

1. Energeticheskiy institut im. X. M. Krzhizhanovskogo AN SSSR, Moskva.  
(Coal) (Carbon dioxide)

GODOVINA, YE. S., and KHITRIN, L. N.,

"Vysokotemperaturnoye Vseainmodayctviye Grafita s Razlichnimi Khimicheski Aktivnymi Gazami.  
(High Temperature Interaction of Graphite with Different Chemically Active Gases.)"

report presented at the Int'l. Symposium on High Temperature Technology held at Asilomar,  
California, 8-11 Sep 63.

AM036546

## BOOK EXPLOITATION

5/

Gerasimov, V. V.; Gromova, A. I.; Golovina, N. S.; Moskvichev, G. S.;  
Pavlova, F. S.; Sedinov, V. V.; Shapovalov, B. T.

Corrosion and irradiation (Nerrossiya i obлучeniye), Moscow, Gosatomizdat, 1963,  
267 p. illus., bibliog. 3,000 copies printed.

TOPIC TAGS: corrosion, irradiation, nuclear reactor, nuclear reactor material,  
metallurgy, stainless steel, chromium steel, carbon steel, low alloy steel,  
aluminum alloy, protective coating, electrochemical behavior

PURPOSE AND COVERAGE: The basis of this monograph was the research conducted by  
the authors in recent years that has been published in the periodical literature  
and the work of Soviet and foreign authors on the problems of the corrosion resis-  
tance of structural materials. The monograph consists of ten chapters in which  
corrosion and the protection of structural materials used in reactors, the inter-  
action of radiation of the nuclear reactor with a substance and the effect of radia-  
tion on the corrosion and electrochemical behavior of metals are examined. The  
general and systematized material on the corrosion resistance of metals used in  
reactors will be useful to a wide circle of designers, researchers, and engineers

Card 1/3

AM4036546

concerned with problems of reactor construction. Chapters I, VII, IX, and X were written by V. V. Gerasimov, Chapters II, IV -- E. T. Shapovalov, Chapter III -- A. I. Gromova, Chapter V -- V. V. Smirnov, Chapter VI -- O. S. Moskvichev, Chapter VIII -- F. S. Pavlova and Ye. S. Golovina. The authors express their gratitude to I. Ye. Zimakov for assistance in writing Chapter IX and their associates who participated in the research.

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Ch. II. Corrosion of stainless steels in water at high temperatures -- 26  
Ch. III. Corrosion resistance of chromium steels -- 47  
Ch. IV. Corrosion behavior of carbon and low alloy steels in water at high temperatures -- 73  
Ch. V. Corrosion of aluminum and its alloys in water-cooled reactors -- 89  
Ch. VI. Corrosion cracking of austenitic stainless steel -- 126  
Ch. VII. Corrosion of structural materials in steam ducts, vapor channels, and boiling reactors -- 156

Card 2/3

AM4036526

Ch. VIII. Protective coatings in reactor construction -- 167  
Ch. IX. Radiation of a nuclear reactor -- 199  
Ch. X. Effect of radiation on the electrochemical behavior of materials -- 229

SUB COIN: NL, NS

SUBMITTED: 14Mar63 MR REF 307:0179

OTHER: 308

DATE ACQ: 07May64

Card 3/3

ACCESSION NR: AP4038442

S/0294/64/002/002/0267/0273

AUTHOR: Golovina, Ye. S.; Khaustovich, G. P.

TITLE: Interaction of carbon with carbon dioxide at high temperatures

SOURCE: Teplofizika vysokikh temperatur, v. 2, no. 2, 1964,  
267-273

TOPIC TAGS: high temperature reaction, carbon, carbon dioxide, specific reaction rate, gas exchange coefficient, combustion

ABSTRACT: Spherical specimens (1.5 cm in diameter) of graphitized carbon (EG-14 brand) were heated in a carbon dioxide-nitrogen atmosphere at 1300—3200K, 1 atm pressure, 25, 50, and 100% CO<sub>2</sub> concentration, and gas velocities of 0.2—0.8 m/sec to study the interaction of solid carbon with CO<sub>2</sub> at high temperatures and to determine the reactivity of carbon in the C + CO<sub>2</sub> reaction. Specific reaction rate K<sub>s</sub> (kg/m<sup>2</sup>·sec), and gas-exchange coefficient α<sub>21</sub>, were determined for the reaction over the studied temperature, concentration, and

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ACCESSION NR: AP4038442

velocity ranges. Visual observation showed that in the temperature range of 1300—1800K, the reaction is accompanied by the separation of a thin scale of carbon detaching from the specimen; at 1800—2300K it is accompanied by the detachment of glowing, fine carbon dust. The weights of the scale and of the dust were determined as a function of the reaction conditions, and the data were used in determining  $K_s$  values. The reaction time and temperature dependence curves of the change in weight, diameter, and specific gravity of the carbon specimen showed that at temperatures up to 2600K, there is a considerable decrease in both the weight and the diameter of the specimen, while the specific gravity remains practically unchanged; at temperatures above 2600K, the specific gravity decreases, while the diameter remains practically unchanged. Thus, at lower temperatures the reaction occurs in the surface layer by diffusion of  $\text{CO}_2$  into solid carbon, and at higher temperatures the diffusion of carbon atoms takes place from the interior to the surface of the carbon specimen. The temperature and  $\text{CO}_2$  concentration dependence curves of  $K_s$  show that below 1800K the  $\text{C} + \text{CO}_2$  interaction is not a first order reaction and above 1800K

Card 2/5

ACCESSION NR: AP4038442

It is of first order for all CO<sub>2</sub> concentrations studied. A comparison of the theoretical and experimental temperature dependence curves of K<sub>s</sub> and a<sub>21</sub> (given in Figs. 1 and 2 of the Enclosure) shows that the experimental data obtained are in disagreement with the existing theory. The anomalous course of the C + CO<sub>2</sub> reaction is discussed in terms of the effective and true activation energy and experimental data obtained by other authors. The effective activation energy of the C + CO<sub>2</sub> reaction at 1300—1700K was found to be 60,000 cal/molecule.

ASSOCIATION: none

SUBMITTED: 25Dec63

DATE ACQ: 09Jun64

ENCL: 02

SUB CODE: PR

NO REF Sov: 010

OTHER: 008

Cord 3/5

ACCESSION NR: AP4038442

ENCLOSURE: 01

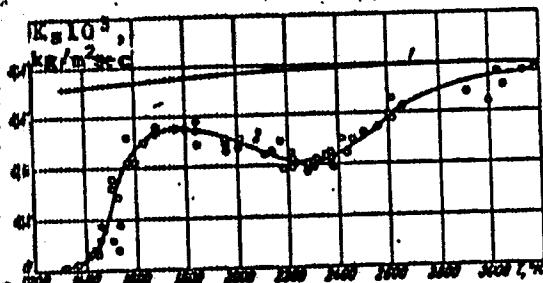
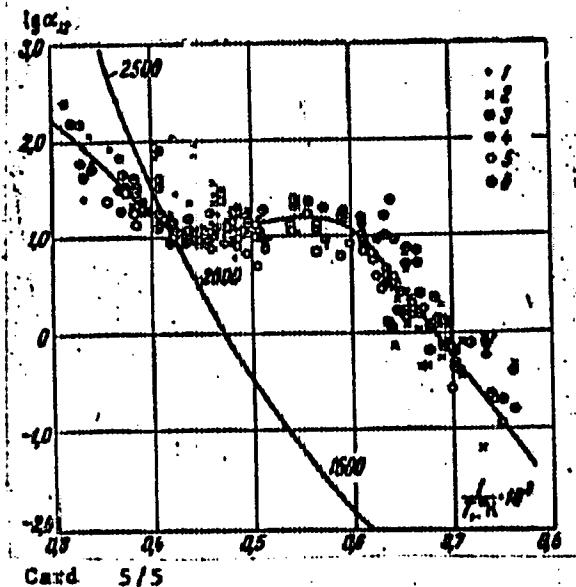


Fig. 1. Calculated curve (1) for the limiting diffusion regime and experimental data (2) for the dependence of the specific reaction rate on temperature. Flow velocity, 0.6 m/sec;  $\text{CO}_2$  concentration, 50%.

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ACCESSION NR: AP4038442

ENCLOSURE: 02



Card 5/5

Fig. 2. Change of the logarithm of the gas exchange reaction coefficient  $\alpha_2$ , for the  $C + CO$  reaction, depending on the inverse temperature values at various flow velocities  $W$ .

1 - 0.2 m/sec, 50%  $CO_2$ ; 2 - 0.4 m/sec, 50%  $CO_2$ ; 3 - 0.6 m/sec, 25%  $CO_2$ ; 4 - 0.6 m/sec, 50%  $CO_2$ ; 5 - 0.6 m/sec, 100%  $CO_2$ ; 6 - 0.8 m/sec, 50%  $CO_2$ .

KHAUSTOVICH, G.P.; GOLOVINA, Ye.S.

Characteristics of high-temperature interaction of carbon  
particles with gases. Inzh.-fiz. zhur. 7 no. 3:92-96 Mr '64.  
(MIRA 17:5)

1. Energeticheskiy institut im. G.M.Krzhizhanovskogo, Moskva.

GOLOVINA, Ye.S.; KHAUSTOVICH, G.P.

Interaction of carbon with carbon dioxide at high temperatures.  
Inzh.-fin. zhur. 7 no.5:106-111 My '64. (MIRA 17:6)

1. Energeticheskiy institut imeni G.M. Krzhizhanovskogo, Moskva.

ALAD'YEV, I.T.; ALEKSANDROV, B.K.; BAUM, V.A.; GOLOVINA, Ye.S.;  
GOL'DENBERG, S.A.; ZHIMERIN, D.G.; ZAKHARIN, A.G.; IYEVLEV, V.N.;  
KNORRE, V.G.; KOZLOV, G.I.; LEONT'YEVA, Z.I.; MARKOVICH, I.M.;  
MEYEROVICH, E.A.; MIKHNEVICH, G.V.; POPKOV, Z.I.; POPOV, V.A.;  
PREIVODITELEV, A.S.; PYATNITSKIY, L.N.; STYRIKOVICH, M.A.;  
TOlstov, Yu.G.; TSUKHANOVA, O.A.; CHUKHANOV, Z.F.; SHEYNDLIN, A.Ye.

Lev Nikolaevich Khitrin, 1907-1965; obituary. Izv. AN SSSR. Energ.  
i transp. no.2:159-160 Mr-Ap '65. (MIRA 18:6)





ACC NR: AP6033957

SOURCE CODE: UR/0294/66/004/005/0703/0709

AUTHOR: Golovina, Ye. S.; Kotova, L. L.

ORG: Power Engineering Institute im. G. M. Krzhizhanovskiy (Energeticheskiy institut)

TITLE: Laws governing high-temperature reactions of carbon in the presence of solid-phase diffusion

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 5, 1966, 703-709

TOPIC TAGS: carbon, carbon dioxide, high temperature <sup>reaction</sup>, solid phase diffusion

ABSTRACT: Earlier, the authors discovered that on reaction of carbon with a gaseous reagent ( $\text{CO}_2$  or  $\text{O}_2$ ) at temperatures above 2300K, the density of the bulk of the solid decreases. To study this phenomenon, an experiment was carried out to determine the distribution of density across a carbon sample as a function of time and temperature in the course of its reaction with nitrogen-rarefied  $\text{CO}_2$  in the 1400—3300K range. The samples were spherical particles, 15 mm in diameter, of VTM-4 graphitized carbon. The carbon particles were induction heated. The reaction rate was determined gravimetrically. Sample diameter changes in time were recorded photographically. The density distribution was determined by successive removal from the particle surface of 0.2—0.25 mm layers and determination of their density. Layer removal was continued until the density of the particle core equalled the initial density. The  $\text{CO}_2$  concentration in the gas phase was 50% and the gas flow

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ACC NR: AP6033957

velocity was 0.6 m/sec. It was found that at 1600--2500K the process is steady-state. As the sample diameter changes the reaction zone, which is of constant depth (about 0.2 mm), moves along the radius. This indicates that the reaction proceeds at the surface under maximum diffusion conditions. The process rate is determined by the diffusion rate of the gas phase toward the carbon surface. At above 2500K, the picture is different. Under maximum diffusion conditions, the gas is consumed at the surface, but because of the mobility of carbon atoms at such high temperatures the carbon atoms strive to occupy the sites vacated in the lattice near the surface. Carbon-atom diffusion from the bulk to the surface of the sample develops. When the rate of diffusion becomes commensurate with or exceeds the reaction rate at the surface, the carbon atoms are able to occupy the vacated sites before the next gas molecule reaches them. In such a case, a considerable change in density but a small change in diameter is observed for the particles. The process in this case will be substantially unsteady-state: the reaction zone depth and the density distribution will constantly change with time. The diffusion coefficient was calculated for unsteady-state conditions. In conclusion, it is noted that the fact of the internal diffusional transfer of a solid in the course of its reaction in a chemically reactive gas phase necessitates a revision of the existing viewpoint on the behavior of the solid in such reactions. The authors thank O. A. Tsukhanova, B. I. Boltaks and R. Sh. Malkovich for reviewing the paper and for discussing the material.

Orig. art. has: 7 figures.

SUB CODE: 07, 21/ SUBN DATE: 22Mar65/ ORIG REF: 006/ OTH REF: 009

Card 2/2

GOLOWINA, Ye. T., Cand Agr Sci -- (diss) "Soils of the  
bottom lands of <sup>the</sup> Moscow River and their utilization." Mos,  
1957. 18 pp (Mos Order of Lenin Agr Acad im K. A. Timir-  
yazev), 110 copies (KL, 52057, 109)

- 88 -

~~GOLOVINA, V. S.~~ ~~soil formation.~~

Some features of soil formation in Moscow River floodlands. Dokl.  
TGU no.291244-250 '57. (MIRA 11:6)  
(Moscow Valley—Soil formation)

J-2

USSR/Soil Science. Soil Genesis and Geography

Abs Jour : Ref Zhur - Biol., No 20, 1958, № 91358

Author : Golovina Ye.T.

Inst : Moscow Agricultural Acad. in. Timiryazev

Title : Characteristics of Soil Formation in the Moscow River Valley

Orig Pub : Dokl. Mosk. s.-kh. akad. in. K.A. Timiryazeva, 1957, vyp. 29, 272-275

Abstract : The findings are cited of a preliminary survey of the entire Moscow river valley from the source to the mouth and of a detailed study of certain physical-chemical properties of the soils in the lower course of the river. In the bottom land of the Moscow river one encounters turf-meadow sandy loam, turf-meadow granular, gleyish, gley and meadow-marsh soils. In the terraced valley land, apart from the soils mentioned, peaty, peat-gley and peat-humus soils are found. The turf process which prevails in the bottom land soils, shades the podzolic. The humus content in the valley soils reaches 6.78 percent. The reaction is neutral and only in

Card : 1/2

MESTEROV, V.G., prof., doktor nauk; MAMAYEV, S.A., kand. nauk; GOLOVINA,  
Ie.P., aspirant.

Districts of gully erosion along the left bank of the Kama above  
the Kuybyshev Reservoir and differentiation between protective  
measures. Dokl. TZhKh no.29:320-324 '57. (MIRA 11:8)  
(Kama Valley-Erosion)

USSR / Soil Science. Physical and Chemical Properties J  
of Soil.

Abs Jour: Ref Zhur-Biol., No 2, 1959, 6059.

Author : Golovina, Ye. T.  
Inst : Moscow Agric. Acad. im. K. A. Timiryazev.  
Title : The Structure of Bottomland Soils.

Orig Pub: Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazeva,  
1957, vyp. 31, 268-272.

Abstract: The bottomland soils of the Moscow River are distinguished in various plots along its middle course by a high content of water-stable aggregates. The younger light loam soil of the land close to the river bed contains microaggregates of > 0.25 mm in diameter totaling about 30%, with 3.9% humus. In the loam soils of the central

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USSR / Soil Science. Physical and Chemical Properties J  
of Soil.

BUSHINSKIY, V.P., akademik; SOLODOVNIKOV, F., kand. sel'skokhozyaystvennykh  
nauk.

Soil formation conditions and soil cover in the Moskva River flood  
land [with summary in English]. Izv. TSkhA no.5:105-116 '58.  
(MIRA 12:1)

I. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.  
Lenina (for Bushinskiy)  
(Moskva River--Soils)

GOLOVINA, Ye.T. (Mamayeva), kand.sel'skokhoz.nauk

Physicochemical characteristics of soils in Sverdlovsk. Okhr.  
prir.na Urale no.3:27-35 '62. (MIRA 16:6)  
(Sverdlovsk—Soils)

KAGAN, I.; GOLOVINA, Z.; KRASNAYA, B.

Changes in the chemical indices of canned meat sterilized at  
135°-150°. Mias. ind. SSSR no.1:50-52 '61. (MIRA 14:7)

I. Ukrainskiy nauchno-issledovatel'skiy institut konservnoy  
promyschlennosti.  
(Meat—Preservation)

GOLOVINA, Z. I.

GOLOVINA, Z. I.--"Method for Repetition Morphology in the Process of Teaching Syntax to the Seventh Class of Middle Schools."\*(Dissertation for Degrees in Science and Engineering Defended at USSR Higher Educational Institutions.)Leningrad State Pedagogical Inst imeni A. I. Gertsen Chair of Methods of Teaching Russian, Leningrad, 1955

SO: Knizhnaya literatura, No. 25, 18 Jun 1955

\* For Degree of Candidate in Pedagogical Sciences

VEDERNIKOV, N.L., dotsent, kand. tekhn. nauk; GOLOVINA, Z.M., assistant

Investigating deformations of circular arches with minor curvatures.  
Trudy RISI no.6:251-257 '58.  
(Arches)

GOLOVINCHITS, V.A., doktor med.nauk

Late results of resection of the jejunum for carcinoma. Khirur-  
giiia no.8:135-137 Ag '62. (MIRA 15:8)

I. Iz khirurgicheskogo otdeleniya (zav. - doktor med.nauk V.A.  
Golovinchits) 58-y gorodskoy klinicheskoy bol'nitsy (glavnyy  
vrach - dotsent Ye.Ya. Khesin) Moskvy.  
(JEJUNUM---CANCER)

RYNDICH, A.; GOMZENKIN, V.; KHABINSKIY, I.

Draft of a price list for shoe repairing remained a draft. Mest.prom. 1  
khnd.promys. 4 no.3t18-19 Nr '63. (Mira 16:4)

1. Nauchno-issledovatel'skiy tekhnokhimicheskiy institut.  
(Boots and shoes—Repairing)

ROSTOVTSEVA, I.; SKALINSKIY, Ye.; SHPAY, N.D.; KARYAGIN, V.I.; KADYROV, N.;  
KOPICHAY, L.S.; IERAGIMOV, R.P.; GOLOVINOV, I.M.

Information and brief news. Veterinariia 40 no.7:87-93 Jl '63.  
(MIRA 16:8)  
(Veterinary medicine)

GOLOVINOV, M.E.; AKUPOV, R.N.; KAGAN, L.S.; LESHKEVICH, G.G.; KURBATOV, V.I.;  
KALUGIN, A.A.

Extrusion of pipe of varying cross sections. TSvet. met. 36  
no. 8:72-75 Ag '63. (MIRA 16:9)  
(Extrusion (Metals)) (Pipe, Aluminum)

ACCESSION NR: AT4037653

S/2981/64/000/003/0120/0135

AUTHOR: Tulyankin, F. V.; Khol'nen, V. I.; Golovinov, M. F.; Uzenev, Ye. K.; Komkov, P. F.; Zinov'yev, V. K.; Ayupova, Ye. O.; Andreyev, A. D.

TITLE: Effect of technological factors on the structure and properties of forgings from alloy V93

SOURCE: Alyuminiyevye splavy\*, no. 3, 1964. Deformiruyemye splavy\* (Malleable alloys), 120-135

TOPIC TAGS: aluminum alloy, alloy V93, forgeable alloy, alloy casting process, alloy forging process, ingot mechanical property, forging mechanical property, ingot structure, forging deformation, ingot reheating, iron content, forging temperature, casting temperature

ABSTRACT: The authors report on the technological development of optimal processes for continuous casting of ingots with diameters up to 800 mm from the recently developed alloy V93 (aluminum based, 0.8-1.2% Cu, 1.6-2.2% Mg, &lt; 0.1% Mn, 0.15-0.4% Fe, ≤ 0.02% Si, 6.5-7.5% Zn and ≤ 0.1% Ti) and for the further processing of ingots into forgings weighing up to 2000 kg. The casting process involved secondary refining of melt in the mixer with molten cryolite flux (3 kg/ton) and crushed magnesite filtration between mixer and mold to remove non-metallic impurities. Ingots were homogenized for 50-55 hrs at 470°C immediately after casting. The structure of all ingots was fine-grained and homogeneous. Coarse grain areas were found peripherally in larger ingots, but proper selection of mold and cooling

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ACCESSION NR: AT4037653

water pressure limited such graining to machining tolerance areas. Forging involved double or triple redrawing and upsetting. It was found that mechanical properties did not vary significantly across the given range of deformation (ingot diameter = 500 mm to pieces 140, 220 and 325 mm thick); however, the strength of the forged pieces was somewhat lower when forged from ingots with diameter = 800 mm at equal deformation levels. The best hardening temperature was  $470 \pm 5^\circ\text{C}$  the optimal forging process involved 12-15 hrs. preheating to a starting forging temperature of  $440-380^\circ\text{C}$  and a final  $320^\circ\text{C}$ . "V. P. Manuylov, Yu. M. Saratovtsev, F. P. Verbovoy, Yu. P. Snetkova, A. G. Slobtsov, Z. N. Cherny\*kh, N. D. Vinokurov, F. F. Andrianov, Ye. S. Volkov, I. Ya. Zal'tzman, V. G. Kovrzhny\*kh and others also took part in the work." Orig. art. has: 13 graphs and 7 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 04Jun64

ENCL: 00

SUB CODE: MM

NO REF SOV: 001

OTHER: 000

Card 2/2

CELIBONOVА-LORER, H. [Chelibonova-Lorar, Kh.]; GOLOVINSKA-PANCEVA, S.  
[Golovinska-Pancheva, S.]; GOLOVINSKY, E. [Golovinski, E.]

Thiocanilides of the picolinic and isonicotinic acids, and their  
influence on the sugar level in blood. Doklady BAN 16 no.1:  
40-51. '63.

1. Vorgelegt von A. Spassov [Spassov, A.]. korr. Mitglied der  
Akademie.

\*

GOLOVINSKAYA, K. A., D. D. ROMANOV and P. A. MOISEYEV

"The Progressing Radioactive Contamination of Waters, Fishes, Animals, and Plants in the Ocean Caused by Atomic Bomb Tests."

report presented at the All-Union Conference on Biological Foundations of Ocean Fishing, 11-15 April 1958, by Ichthyological Committee of AS USSR, VNIRO, and Inst. Oceanograph, AS USSR.  
(Vest. AI SSSR, 1958, No. 7, pp. 131-133)

GOLOVINSKAYA, K.A.; ROMASHOV, D.D.

Effect of ionising radiation on the development and reproduction  
of fishes. Vop. ikht. no.11:16-38 '58. (MIRA 12:1)

1. Laboratoriya radiatsionnoy genetiki Instituta biofiziki AN SSSR  
i Vsesoziyskiy nauchno-issledovatel'skiy intitut prudnogo rybnoye  
khozyaystva.  
(Radiation--Physiological effect)  
(Fishes)

TSITSIN, N.V., akademik, otd.red.; BREZHNEV, D.D., akademik, zamestritel'  
otd.red.; GORYUNOV, D.V., zamestritel' otd.red.; BYLOV, V.N., red.;  
GOLOVINASAYA, K.A., kand.biolog.nauk; red.; KHLI, A.Ch., red.;  
LAPIN, F.I., red.; MAKHALIN, M.A., red.; OGOLEVETS, O.S., red.;  
FORTUNATOV, I.K., red.izd-va; VASINA-POPOVA, Ye.T., red.izd-va;  
GUS'KOVA, O.M., tekhn.red.

[Remote hybridization of plants and animals; problems in fruit  
culture, forestry, and animal breeding] Otdalennaia gibridi-  
zatsiya rastenii i zhivotnykh; voprosy plodovodstva, lesovedstva  
i zhivotnovodstva. Moskva, Izd-vo Akad.nauk SSSR, 1960. 597 p.  
(MIRA 13:5)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.  
Lenina. 2. Pervyy vices-president Vsesoyuznoy akademii sel'sko-  
khozyaystvennykh nauk imeni V.I.Lenina (for Brezhnev). 3. Institut  
biologicheskoy fiziki Akademii nauk SSSR i Vserossiyskiy nauchno-  
issledovatel'skiy institut prudovogo rybnogo khozyaystva, Moskva  
(for Golovinskaya).

(Hybridization)

AKHMEROV, A.Kh., kand.biol.nauk; BATEIKO, A.I., kand.sel'skokhos.nauk;  
BRUDASTOVA, N.A., kand.tekhn.nauk; GOLOVINSKAYA, K.A., kand.biolog.  
nauk; GUS'DOV, I.M., kand.ekon.nauk; DROZHKOVA, S.M., rybovod-biolog;  
YEROKHINA, L.V., rybovod-biolog; IL'IN, V.M., rybovod-biolog;  
ISAYEV, A.I., rybovod-biolog; KADENICH, O.V., rybovod-biolog;  
KOMAROVA, I.V., kand.biol.nauk; KRYNOVA, R.V., rybovod-biolog;  
KULAKOVA, A.N., rybovod-biolog; MAMOSTOVA, L.N., kand.biol.nauk;  
MITSNER, Ye.V., kand.biol.nauk; MIKHNIK, P.V., kand.biol.nauk;  
MOCHINA, B.I., kand.biol.nauk; PACHOMOV, S.P., kand.biol.nauk;  
SUKHOVICHOV, F.M., kand.biol.nauk; SOKOLOVA, Z.P., rybovod-bio-  
log; TSURUCHIKI, E.I., rybovod-biolog; RYZHENKO, M.I., red.; KOSOVA,  
O.M., red.; SOKOLOVA, L.A., tekhn.red.

[Handbook on pond fish culture] Spravochnik po prudovomu rybovodstvu.  
Red.kollegiia: A.I.Isaev i dr. Moskva, Fishchepromisdat, 1959. 374 p.  
(MIRA 13:4)

1. Moscow. Vserossiyskiy nauchno-issledovatel'skiy institut prudo-  
vogo rybnogo khozyaystva.  
(Fish culture)

ROMASHOV, D.D., GOLOVINSKAYA, K.A.

Radiation contamination of fishes. Trudy sov. ikht. kom. no.10:26 '60.  
(MIRA 13:10)

1. Institut biofiziki Akademii nauk SSSR(for Romashov). 2. Vserossiyskiy  
nauchno-issledovatel'skiy institut prudovogo rybnogo khozyaystva  
(VNIPRIKh) (for Golovinskaya).  
(Radioactivity--Physiological effect) (Fishes)

ROMASHOV, D.D.; MOLOVINSKAYA, K.A.

Radiation biology and genetics of fishes. Itogi nauki; Biol. nauki  
no. 3:324-343 '60. (MIA 13:10)  
(RADIATION--PHYSIOLOGICAL EFFECT) (FISHES)

ROMASHOV, D.D.; GOLOVINSKAYA, K.A.; BELYAYEVA, V.N.; BAKULINA, E.D.  
POKHROVSKAYA, G.L.; CHERPAS, N.B.

Radiation-induced diploid gynogenesis in fishes. Biofizika 5  
no. 4:461-467 '60. (MIRA 13:12)

1. Institut biologicheskoy fiziki AN SSSR, Moskva i Institut  
prirodoznanii rybnogo khozyaistva RSFSR, Moskva.  
(EMBRYOLOGY—FISHES) (X RAYS—PHYSIOLOGICAL EFFECT)  
(FERTILIZATION (BIOLOGY))

27 12 20

42694

S/747/62/000/000/015/025  
D296/D307

AUTHORS: Romashov, D. D., Belyayeva, V. N., Golovinskaya, K. A.  
and Prokof'yeva-Bel'govskaya, A. A.

TITLE: Radiation injuries in fish

SOURCE: Radiatsionnaya genetika; sbornik rabot. Otd. biol. nauk  
AN SSSR. Moscow, Izd-vo AN SSSR, 1962, 247-266

TEXT: The problem is of economic interest in connection with radioactive contamination of natural waters. In young carp stages of radiation sickness similar to those known in mammals can be observed. As a whole, however, fish can tolerate much higher doses of radiation and the minimum lethal dose may be > 2000 r. Doses of 500 and particularly of 600 or 1,000 r delay the development of the sex glands without impairing the viability of young fish. Up to doses of 2,000 - 6,000 r, the degree of injury is proportional to the dose, but at much higher doses the nucleus of the spermatozoon becomes inactive and the injuries are less marked ("Hertwig effect"). Very high doses (100,000 r and more) lead to the develop-

Card 1/3

Radiation injuries in fish

S/747/62/000/000/015/025  
D296/D307

ment of numerous degenerated haploid individuals possessing only the maternal set of chromosomes. In addition, however, a few normally growing individuals can be found; these are "diploid gynogenetic" individuals, i. e. owing to a further division they have two sets of chromosomes which are both of maternal origin. The authors devised a technique of increasing the proportion of these diploid gynogenetic individuals up to 15 - 60% of the spawn by a method consisting of exposure to "cold shock". Here the fertilized spawn is kept 3 hours at a temperature between 1 and 3°C, beginning precisely 10 minutes after fertilization. The damage caused in the chromosomes by radiation can be followed up through a number of cell divisions in the course of embryogenesis, to the larval stage or until the age of 25 days. In young fish embryos the dicentrical chromosomes and chromatids are unstable and serve as a source of intracellular fragments. The cycle of chromosome- and chromatid-bridges becomes relatively stable only in the later gastrula stage. There are 4 figures and 3 tables.

Card 2/3

Radiation injuries in fish

S/747/62/000/000/015/025  
D296/D307

ASSOCIATION: Institut biologicheskoy fiziki AN SSSR (Institute of  
Biological Physics, AS USSR) and Institut prudovogo  
rybnogo khozyaystva, RSFSR, Moskva (Institute of  
Freshwater Fisheries, RSFSR, Moscow)

Card 5/3

GOLOVINSKAYA, N. V.; BOTNOVA, O. S.; ZEN'KEVICH, K. F.

Electromyographic studies of incorrect habitual postures which favor the formation of scoliosis in children. Trudy LSGMI 64: 67-78 '61. (MIRA 15:7)

1. Otdeleniya lechebnoy fizicheskoy kul'tury i fisiologicheskaya laboratoriya Gosv'zdravstvennogo nauchno-issledovatel'skogo detskogo ortopedicheskogo instituta imeni G. I. Turnera. Zav. laboratoriyy - prof. Yu. M. Uflyand; rukovoditel' otdeleniya - starshiy nauchnyy sotrudnik N. V. Golovinskaya.

(ELECTROMYOGRAPHY) (POSTURE)  
(SPINE--ABNORMALITIES AND DEFORMITIES)

GOLOVINA, Z. T.

Q-2

USSR / Farm Animals. Cattle.

Abstr Jour: Ref Zhur-Biol., No 12, 1958, 54766.

Author : Panyushkin, A. N., Gruzinov, A. A., Kolodezhnyy  
I. S. Golovina, Z. T.

Inst : Not given.  
Title : On the Effect of Certain Concentrates Upon the  
Weight Increase and Fat Deposition in Young  
Cattle.

Orig Pub: Tr. Chkalovskiy n.-i. in-t molochno-myasn. sko-  
tovodstva, 1958, vyp. 10, 299-305.

Abstract: Following the summer period of growing and pas-  
ture, four groups (six heads in each) of Aber-  
deen-Astrakhan castrated young bulls were formed,  
taking into account age, live weight and degree  
of fatness. During 40 days of fattening on pas-  
ture, the animals were receiving the following

Card 1/2

GOLOVINCHITS, V.A.

36449. GOLOVINCHITS, V. A. I SHIKHTER, I. A.

Osnovni I Yazyva Zheludka V Svetle Rentgeno - Gastroskopicheskikh I  
Patologoanatomicheskikh Parallelley. Khirurziya, 1949, No. 11, S. 39-46

SO: Letonis' Zhurnal'nykh Statey, Vol. 49, Moskva, 1949

GOL'CVINSKAYA, N. V. "On the use of a newly designed tonometer in children's orthopedia", Sbornik nauch. trudov (N-vo zdravookhraneniya RSFSR. Resp. nauch.-issled. inst. vosstanovleniya trudosposobnosti fiz. defektivnykh detey im. prof. Turnera), Leningrad, 1949, p. 383-95.

SO: U - 3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 1, 1949).

GONCHAROVA, M.N., professor; KRYSHOVA, N.A., professor; LYANDERS, Z.A., doktor meditsinskikh nauk; LEVIN, I.M., kandidat meditsinskikh nauk; GOLOVINSKAYA, N.V., iandidat meditsinskikh nauk; POLONSKIY, M.N., kandidat meditsinskikh nauk; GLOTOVA, L.I., kandidat meditsinskikh nauk; ZHURINA, Ye.V., kandidat meditsinskikh nauk

Treatment of children with aftereffects of poliomyelitis. Vop. okh. mat. i det. 1 no.1:43-52 Ja-Y '56. (MIRA 9:9)

1. Iz Nauchno-issledovatel'skogo detskogo ortopedicheskogo instituta imeni G.I.Turnera, Leningrad.  
(POLIOMYELETIS)

USSR/Human and Animal Physiology - Nerve and Muscle Physiology. T-9

Abs Jour : Ref Zhur - Biol., No 18, 1958, 84492

Author : Gandel'sman, A.B., Golovinskaya, N.V.

Inst : Leningrad Medical Institute of Sanitary Hygiene and  
Scientific Research Institute of Child Orthopedics.

Title : Recrientation of Motor Functions after Myo- and Tenoplasty.

Orig Pub : Tr. Leningr. san.-gigien. med. in-ta i zdr. detsk. ortoped.  
in-ta, 1956, 29, 53-63.

Abstract : In children suffering from residual symptoms of phibomyclitis, muscular motor chronax and muscular "static" tonus in various positions of the body were studied. The observations were made through a window cut into the plaster cast above the myogaster at various times after the operation. The maximum success which could be achieved in training the children who wore plaster casts, consisted in

Card 1/2

Abs Jour : Ref Zhur - Biol., No 18, 1958, 84492 T-9

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515820008-2

GOLOVINSKAYA, N.V.  
BORTFEL'D, S.A.; GOLOVINSKAYA, N.V.; REGO, S.I.

Characteristics of the state of muscles in children in chronic spastic paralysis according to tonometric and chronaximetric investigations.  
Trudy LSOMI 29:277-288 '56.  
(MLRA 10:3)

1. Fiziologicheskaya laboratoriya (zav. - prof. Yu.M. Uflyand) i  
Otdeleniya lechebnoy fizicheskoy kultury (zav. - prof. A.B.  
Gandel'sman) Instituta im. Turnera  
(PARALYSIS, in infant and child,  
spastic congen., tonometry & chronaximetry of musc. (Rus))

UFLYAND, Yu.M., prof.; GOLOVINSKAYA, N.V., starshiy nauchnyy sotrudnik;  
KRIVONOS, S.Ya., starshiy nauchnyy sotrudnik

Physiological studies of late results of tendon and muscle trans-  
plantation in poliomyelitis. Ortop.travn.i protez. 20 no.8:8-15  
Ag '59. (MIRA 12:11)

1. Iz fiziologicheskoy laboratorii (zav. - prof. Yu.M. Uflyand)  
Nauchno-issledovatel'skogo detskogo ortopedicheskogo instituta im.  
G.I. Turnera (dir. - prof. M.N. Goncharova).  
(POLIOMYELITIS, surgery)  
(TENDONS, transplantation)  
(MUSCLES, transplantation)

BOYKOVA, O.S., metodist lechebnoy fizicheskoy kul'tury; BORTFEL'D, S.A., kand. ped. nauk; GANDEL'SMAN, A.B., prof., doktor med. nauk; GOLOVINSKAYA, N.Y., kand. biol. nauk; GONCHAROVA, M.N., prof., doktor med. nauk; MIRZOYEVA, I.I., red.; KHARASH, G.A., tekhn. red.

[Exercise therapy in the pediatric orthopedic clinic] Lechebnaia fizicheskaiia kul'tura v detskoi ortopedicheskoi klinike. Leningrad, Medgiz, 1961. 191 p. (MIRA 15:4)  
(EXERCISE THERAPY) (ORTHOPEDIC NURSING)

BORTFEL'D, Serafima Aleksandrovna; GOLOVINSKAYA, Nadezhda Vasil'yevna;  
VILENSKIY, B.S., red.; BUGROVA, T.I., tekhn.red.

[Medical gymnastics in the restorative period of poliomyelitis  
in children] Lechebnaia gimnastika v vosstanovitel'nom perioe  
poliomielita u detei. Leningrad, Medgiz, 1962. 63 p. (MIRA 16:6)  
(POLIOMYELITIS) (EXERCISE THERAPY)

LYANDRES, Z.A., prof.; BORTFEL'D, S.A., starshiy nauchnyy sotrudnik;  
GOLOVINSKAYA, N.Y., starshiy nauchnyy sotrudnik;  
ZAKREVSKII, L.Z., starshiy nauchnyy sotrudnik; ZAYDEL', O.P.,  
nauchnyy sotrudnik; MANUKHINA, Z.P., nauchnyy sotrudnik;  
BOTKOVA, O.S., nauchnyy sotrudnik

Concepts of the abnormalities of posture and scoliosis in  
children. Ortop., travm. i protez. 25 no.11:81-85 N °64.  
(MIRA 18:11)

1. Iz Detskogo ortopedicheskogo Instituta imeni G.I. Turnera  
(dir. - prof. M.N. Gencharova), Leningrad. Adres avtorov:  
Leningrad M-136, Lakhinskaya ul., d.10/12, Detskiy ortopedi-  
cheskiy institut Turnera. Submitted January 27, 1964.

LONDARENKO, O.M.; GOLOVINSKAYA, S.M. [Holovins'ka, S.M.]; SAVCHENKO, N.M.; LIKHTIK, O.C. [Likhtyk, O.H.]; BARANSKAYA, S.F. [Barans'ka, S.F.]; RACHINSKAYA, T.V. [Rachyns'ka, T.V.]

Proposals of efficiency promoters of the "Children's Clothing" Factory No.4 in Kiev. Leh. prom. no.3:74-76 Jl-S '65.  
(MIRA 18:9)

18.7500 1454

33714  
S/686/61/000/000/006/012  
D207/D303

AUTHORS: Grozin, B. D., Semirog-Orlik, V. N., Golovinskaya, T.M.,  
Nizhnik, S. B. and Yankevich, V. F.

TITLE: Phase and structural changes in steel under conditions  
of temperature and pressure shocks

SOURCE: Soveshchaniye po voprosam teorii sukhogo treniya i obra-  
zovaniya chastits iznosa pri sukhom trenii. Riga, 1959,  
97-105

TEXT: The authors investigated the crystal structure and composi-  
tion of "white" layers formed on steel by high pressures and tem-  
peratures. For x-ray diffraction work an instrument YPC-50M (URS-  
50I) was used; electron-microscopic and spectroscopic techniques  
were also employed. The authors studied the effects of (1) grind-  
ing roller-bearing parts with an abrasive disc rotating at various  
speeds and subjected to various loads; (2) normal working condi-  
tions on transmission gear teeth from a FAZ-63 (GAZ-63) automobile,  
and (3) hot-gas blasts (1200 kg/cm<sup>2</sup> for 0.0025 sec) on steels 45

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Phase and structural ...

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D207/D303

and  $\gamma$ 10 (U10). In all three cases similar changes occurred: (1) Well above their critical temperatures both austenite and martensite were formed in hypereutectoid steel and martensite only in hypoeutectoid steel; (2) austenite, martensite and ferrite were formed in all steels just above the lower critical temperature; (3) below the critical temperature ferrite was formed, by thermoplastic annealing, in all steels; (4) austenite, martensite and ferrite formed in these processes differed considerably in carbon content and lattice parameters from those obtained by the usual heat treatments. There are 9 figures.

ASSOCIATION: Institut stroitel'noy mekhaniki AN USSR (Institute of Building Mechanics AS UkrSSR)

Card 2/2

GOLOVINS'KAIA, T. M.

84165

1300 1308 emly

S/021/60/000/002/007/010  
A158/A029

AUTHORS: Hrozin, H.D., Corresponding Member of the AS UkrSSR; Holovins'ka,  
T.M.

TITLE: Effect of the Position of Fibers Upon the Physical State of the  
Surface Layers of Thermally-Treated ShKh15 (ShKh15) Steel When the  
Latter is Tested by Rolling Friction ✓

PERIODICAL: Dopovidia Akademiyi nauk Ukrayins'koyi Radians'koyi Sotsialistichnoyi  
Respubliky, 1960, No. 2, pp. 184 - 187

TEXT: Noting the inadequacy of available studies of subject matter, the  
authors report the results of their own studies conducted on three types of cylin-  
drical specimens of ShKh15 steel with the arrangement of the fibers along the  
axis, at 45° and at 90° toward it. All specimens were made from low-temperature  
tempered ShKh15 steel and had 6 mm in diameter. They were tested between two  
148 mm disks having a 5 mm radius of curvature of surfaces, under a pressure of  
510 kg/mm<sup>2</sup> and at a speed of revolution of each specimen reaching 4,500 rpm.  
The test lasted for 24 h. A sufficiently narrow (0.2 mm), powerful X-ray beam  
for the examination of the paths of the specimens on the disks was obtained with  
the help of a sharply focused X-ray tube designed by B.Ya. Pines (Ref. 1), in

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S.021/60/000/002/007/010  
A158/A029

Effect of the Position of Fibers Upon the Physical State of the Surface Layers of Thermally-Treated WIX15 (ShKh15) Steel When the Latter is Tested by Rolling Friction

the X-ray area. Secondary details of the test are given. In all cases martensite decomposition was evident. Hardening and subsequent softening were noted with a rise in the number of cycles. Quality of the bearing surface corresponded to the widening of the path of rolling that followed an increased stresses of the second order. The most stable X-ray characteristic of stability of the surface layers was found on samples having fibres running along the axis. Therefore, to increase the strength of bearings, it is recommended to use steel whose fibres run parallel to the axis of bearings. There are: 1 set of figures, 1 drawing and 2 Soviet references.

ASSOCIATION: Instytut budivel'noyi mekhaniki AN UkrSSR (Institute of Construction Engineering of the AS UkrSSR)

PRESENTED: June 25, 1959

Card 2/2

L1326-67 EWP(k)/EWT(m)/EWP(w)/EWP(t)/ETI IJP(c) JD  
ACC NR: AP6020918 SOURCE CODE: UR/0369/66/002/002/0204/0208

AUTHORS: Bezruchko, I. V.; Golovinskaya, T. M.; Gorb, M. L.; Panchenko, N. P.; Chernenko, V. S.; Chernyak, N. I.

ORG: Mechanics Institute of the AN UkrSSR, Kiev (Institut mekhaniki AN UkrSSR); First GPZ, Moscow (Pervyy GPZ)

TITLE: Effects of the physical condition of the surface layer, formed during grinding, on the contact wear resistance of steel ShKh15

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 2, no. 2, 1966, 204-208

TOPIC TAGS: surface fatigue, surface property, metal friction, steel property, grinding wheel, electron microscope, steel, x-ray equipment/ ShKh15 steel, EB60SM2K grinding wheel, E46SM2K grinding wheel, UTM-6M microscope, UEM-100 electron microscope, UPS-50I x-ray equipment

ABSTRACT: The effects of the structure and depth of structural gradients on the surface fatigue of ShKh15 steel were investigated. Thirty-five millimeter diameter x 10-mm thick disc-shaped specimens were heat-treated and ground using wheel EB60SM2K and finish-ground with wheel E46SM2K. Three grinding regimes (0.005 mm/rev, 0.15 mm and 0.25 mm) were used to produce structural changes in layers of 10--20, 150--160, and 220--250 micron respectively. After lapping to an 11--12 class finish, surface fatigue tests were performed at 1750 rpm using methods described by M. A. Puzanov

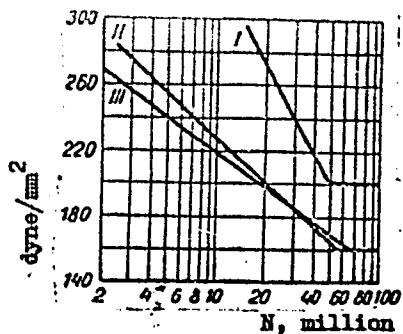
Cord. 1/2

L 10326-67

ACC NR: AP6020918

(Sb. Povysheniye iznosostoykosti detaley mashin, Izd. AN UkrSSR, 1956, No. 22). Microstructural studies of the surface layers were performed using optical and electron microscopes (MIM-SM and UEM-100 respectively) and x-ray equipment (UPS-50I). A discussion of the structural changes for the different grinding regimes is included, and the experimental results are summarized in Fig. 1.

Fig. 1. Surface fatigue of group I, II, and III specimens (corresponding to structural changes in layers of 10--20, 150--160, and 220--250 micron respectively)



Orig. art. has: 5 figures.

SUB CODE: 11,13/ SUBM DATE: 17Jul65/ ORIG REF: 003

..... 2/2 2LR

3/5/4/61/000/005/010/014  
100/1207

AUTHORS: Grossin, A.A., Smirnov-Orlik, V.N., and Golovinakaya, T.N., Kizhnik, S.B., Yudovich, S.R.

TITLE: Structural transformations during grinding

SUBJECT: Akademiya Nauk SSSR. Komissiya po tekhnologii mashinostroyeniya.  
Seminar po kachestvu poverkhnosti. Trudy no.5, 1961. Kachestvo  
poverkhnosti detaley mashin; metody i pribory, uprochneniye metallov,  
tekhnologiya mashinostroeniya, 277-282

TEXT: Results are reported on investigations carried out to aid in selecting suitable grinding technology taking into account the structural transformations connected with different machining conditions. Steel specimens were subjected to varying machining conditions rough grinding with a peripheral velocity of the grinding disc, —— 46 m/sec and a transversal feed — 1.2/L/min; fine grinding on the same disc but with maximal feed; name lapping by means of cast-iron laps. After machining the test specimens were subjected to electron microscope examination, which revealed the existence of four distinct zones caused by varying machining conditions.  
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2/5.14/01/000/005/010/014  
1001/1207

Structural transformations....

From here the conclusion can be drawn on the importance of structural transformations connected with the service life of components, for the selection of a suitable grinding technology. There are 5 figures.

Card 2/2

AMERICAN  
ACC NR: AP6027489 (A) SOURCE CODE: UR/0418/66/000/003/0063/0066

AUTHOR: Bezruchko, I. V. (Engineer); Golovinskaya, T. M. (Engineer); Gorb, M. L. (Engineer); Panchenko, N. P. (Engineer); Chernenko, V. S. (Engineer); Chernyak, N. I. (Engineer)

ORG: None

TITLE: Contact fatigue strength of ShKh15 bearing steel

SOURCE: Tekhnologiya i organizatsiya proizvodstva, no. 3, 1966, 63-66

TOPIC TAGS: fatigue test, fatigue strength, steel microstructure, x-ray analysis, BEARING STEEL / SHKH15 BEARING STEEL

ABSTRACT: The authors describe a study carried out at the Institute of Mechanics AN UkrSSR in cooperation with the First State Bearing Plant on the contact fatigue strength of ShKh15 bearing steel. The basic criterion in evaluating polishing conditions is taken as the physical state of the layer structure and depth of structural variation. Mechanical methods for testing contact fatigue strength and for measuring microhardness were used together with metallophysical methods and microstructural and x-ray structural analysis. Steel specimens used for these tests were heat treated after finish machining. The following heat treatment procedures were used: quenching at 850°C in 40-50°C oil, cold processing with cooling to -30°C and tempering at 150-160°C. These conditions give specimens with a hardness of HRC 62-64. After heat treatment the specimens were polished under various conditions. The specimens were divided into three groups according to the amount of metal removed: 0.1 mm for the first group; 0.15 mm for the second and 0.25 mm for the third. Depth of structural

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UDC: 620.17:669.14

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ACC NR: AP6027489

variation after polishing for the various groups is the following: 10-30  $\mu$  for the first group, 150-170  $\mu$  for the second and 220-250  $\mu$  for the third. Microstructural analysis for the first group shows that structural variation is not significant. The microhardness of these specimens is 950-1000 kg/mm<sup>2</sup>. X-ray analysis for this group of specimens shows that variations due to polishing and honing are localized in a layer 10-30  $\mu$  thick. Slight deformation and elongation of the crystal lattice of the  $\alpha$ -phase is observed in this layer. Depth of variation for the second group of specimens is 150-170  $\mu$ . This is substantiated by microhardness measurement data and microstructural and x-ray analysis. Depth of variation for the third group reaches 250  $\mu$ , these variations being similar to those of the second group. The unetched surfaces of the specimens in the first and second groups examined under an electron microscope show scaly tearing and deep scratches caused by polishing. After etching, secondary solid solutions are observed on individual surfaces oriented in the direction of polishing. A graph is given showing the contact fatigue strength of all three groups. The results show that contact fatigue limit for the second and third groups is identical (150-160 kg/mm<sup>2</sup>), differing from the first group where maximum contact strength is 200 kg/mm<sup>2</sup>. Pit depth for the first group under staining does not exceed 300  $\mu$ , reaching 600-700  $\mu$  for the second and third groups. All groups show large-scale microfocal scaling after testing observed on the electron microscope. The authors recommend that polishing procedures be selected which have the minimum effect on the structural variation of the surface layer of ShKh15 steel. Orig. art. has: 4 figures.

SUB CODE: 11/ SUBM DATE: None

Card 2/2 *Hf*